



UNITED STATES PATENT AND TRADEMARK OFFICE

mn
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/775,033	02/01/2001	Michael A. Friedman	MSFT-0302/167451.1	8315
41505 7590 08/06/2007 WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION) CIRA CENTRE, 12TH FLOOR 2929 ARCH STREET PHILADELPHIA, PA 19104-2891			EXAMINER KE, PENG	
			ART UNIT 2174	PAPER NUMBER
			MAIL DATE 08/06/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/775,033

Applicant(s)

FRIEDMAN ET AL.

Examiner

Peng Ke

Art Unit

2174

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 42-67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 and 42-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/23/07.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/21/07 has been entered.

This action is final.

Claims 1-25, and 42-67 are pending in this application. Claims 1, 42, and 67 are independent claims. In the Amendment, filed on 5/21/07, claims 1, 42, and 67 were amended.

Claim Objections

Claim 42 is objected to because of the following informalities: "wherein said universal console instantiates a user interface...." Appropriate correction is required.

Claims 23 and 64 are objected to because of the following informalities: "a representation associated with a group construct that..." Appropriate correction is required.

Examiner interprets this limitation to be "associated with a group that"

Claim Rejections - 35 USC § 101

35 U.S.C. § 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

As set forth in MPEP 2106 (II) (A):

The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed

Art Unit: 2174

to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); In re Ziegler, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)). Accordingly, a complete disclosure should contain some indication of the practical application for the claimed invention, i.e., why the applicant believes the claimed invention is useful.

Apart from the utility requirement of 35 U.S.C. 101, usefulness under the patent eligibility standard requires significant functionality to be present to satisfy the useful result aspect of the practical application requirement. See Arrhythmia, 958 F.2d at 1057, 22 USPQ2d at 1036. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make the invention eligible for patenting. For example, a claim directed to a word processing file stored on a disk may satisfy the utility requirement of 35 U.S.C. 101 since the information stored may have some "real world" value. However, the mere fact that the claim may satisfy the utility requirement of 35 U.S.C. 101 does not mean that a useful result is achieved under the practical application requirement. The claimed invention as a whole must produce a "useful, concrete and tangible" result to have a practical application.

As set forth in MPEP 2106 (IV) (B) (1):

Claims to computer-related inventions that are clearly nonstatutory fall into the same general categories as nonstatutory claims in other arts, namely natural phenomena such as magnetism, and abstract ideas or laws of nature which constitute "descriptive material." Abstract ideas, Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759, or the mere manipulation of abstract ideas, Schrader, 22 F.3d at 292-93, 30 USPQ2d at 1457-58, are not patentable. Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data. Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*. Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and Warmerdam, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory).

As set forth in MPEP 2106 (IV)(B)(1)(a):

Similarly, computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs, are not physical things. They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. Accordingly, it is important to distinguish claims that define descriptive material *per se* from claims that define statutory inventions.

Products may be either machines, manufactures, or compositions of matter.

A machine is "a concrete thing, consisting of parts or of certain devices and combinations of devices." *Burr v. Duryee*, 68 U.S. (1 Wall.) 531, 570 (1863).

If a claim defines a useful machine or manufacture by identifying the physical structure of the machine or manufacture in terms of its hardware or hardware and software combination, it defines a statutory product. See, e.g., *Lowry*, 32 F.3d at 1583, 32 USPQ2d at 1034-35; *Warmerdam*, 33 F.3d at 1361-

Art Unit: 2174

62, 31 USPQ2d at 1760.

Office personnel must treat each claim as a whole. The mere fact that a hardware element is recited in a claim does not necessarily limit the claim to a specific machine or manufacture. Cf. *In re Iwahashi*, 888 F.2d 1370, 1374-75, 12 USPQ2d 1908, 191 1-12 (Fed. Cir. 1989), cited with approval in *Alappat*, 33 F.3d at 1544 n.24, 31 USPQ2d at 1558 n.24.

Claim 67 is rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

Claim 67 represents a software embodied in computer-readable media, and when executed operable to receive and communicate. It is noted that computer-readable media comprises wireless telecommunication signals and carrier waves, forms of energy. As forms of energy, the signals and waves are not a matter, composition of matter or product; and do not fall within any one of categories of patentable subject matter. For further rejecting the claims under 35 USC §102 or 35 USC §103, Examiner interprets the "computer-readable media" as computer readable storage medium upon which software is embodied.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Claims 1, 2, 5-11, 13, 14, 24-25, 43, 46-52, 54, 55, 65-66 and 67 are rejected under 35 U.S.C. 102(e) as being anticipated by Humpleman US Patent 6,243,707.

As per claim 1, Humpleman teaches a method for controlling at least one computing element with a universal console (UC), comprising:

receiving input from a user indicative of at least one user preference for a universal console; (see Humpleman, column 21 ,lines 25-55; The uses can indicate his preference for a home device, by creating a macro and choosing the parameters of the respective home device to their desired value, further; and home device includes pc and DTV; see Humpleman, column 23 ,lines 1-12; which are universal console because they control other device through macro; see Humpleman; column 6, lines 50-60)

storing the at least one user preference; (see Humpleman; column 21, lines 50-70; save macro on home device)

selecting a computing element to control with the universal console; (see Humpleman, column 22, lines 40-50; The user selects the DVCR device button, the session manager determines the particular capabilities of the selected DVCR device and compares them with the particular capabilities of the other accessible devices on the home network; column 18, lines 20-55)

receiving by the universal console a canonical user interface (UI) representative of the computing element's user interface, wherein the canonical user interface is pre-defined for the computing element and includes at least one action-command operable to control said computing element; (see Humpleman, column 7, lines 15-60; The home device, which includes computing element, transfers its HTML to DTV, which the user can use to control the home device. HTML

Art Unit: 2174

defines the control and command for that particular home device)

instantiating a user interface description by the universal console as a function of the stored at least one user preference and the canonical user interface; (see Humpleman, column 7, lines 35-50; a device connected the home network that has a viewable display and employs the browser technology may receive and interpret the HTML files associated with the home devices connected to the home network, and graphically display the information contained therein using a GUI on its screen; Macro, which contains user preference, instantiate a user interface; see Humpleman; column 22, lines 5-40)

selecting at least one action-command to be carried out by the computing element; (see Humpleman; column 18, lines 10-25; The user selects the DVCR device button, the session manager determines the particular capabilities of the selected DVCR device and compares them with the particular capabilities of the other accessible devices on the home network) and

transmitting to the computing element data associated with said at least one action-command using a remote procedure call mechanism. (see Humpleman; column 8, lines 5-20; In order to invoke the local http server to respond, clicking on a button preferably involves an http access to the local machine name or IP address. In turn, the Http server invokes the local device control program, such as "brightness.")

As per claim 2, Humpleman teaches a method according to claim 1. Humpleman further teaches wherein said selecting at least one action-command includes requesting information about the state of said at least one computing element. (see Humpleman; column 20, lines 25-40; The data specifications of the DVCR for the play service, are subsequently forwarded to the session manger, and the DVCR's state of play is sent to session manager is upon user selecting play on the GUI; column 14 ,lines 60-column 15 ,lines 15; column 17, lines 10-25; Humpleman graying out deactivated buttons)

As per claim 5, Humpleman teaches a method according to claim 1. Humpleman further teaches carrying out said action-command by said computing element. (see Humpleman; column 18, lines 10-25; The user selects the DVCR device button, the session manager determines the particular capabilities of the selected DVCR device and compares them with the particular capabilities of the other accessible devices on the home network; see Humpleman; column 8, lines 5-20; In order to invoke the local http server to respond, clicking on a button preferably involves an http access to the local machine name or IP address. In turn, the Http server invokes the local device control program, such as "brightness.")

As per claim 6, Humpleman teaches a method according to claim 1, further including receiving by the UC notifications from the computing element. (see Humpleman; column 20, lines 25-40; The data specifications of the DVCR for the play service, are subsequently forwarded to the session manger, and the DVCR's state of play is sent to session manager is

Art Unit: 2174

upon user selecting play on the GUI; column 14 ,lines 60-column 15 ,lines 15)

As per claim 7, Humpleman teaches a method according to claim 6, wherein said notifications include at least one of an error message, warning message, status update message and state change. (see Humpleman; column 22, lines 50-column 23 , lines 30, Periodically determine what is in the DVD and CD player is determining state of the players)

As per claim 8, Humpleman teaches a method according to claim 1. Humpleman further teaches wherein said canonical UI representation is formatted according to an XML stream. (see, Humpleman each home device contain interface data of XML that provides an interface for the commanding and controlling of the home device over the home network)

As per claim 9, Humpleman teaches a method according to claim 1, further including requesting a list of available devices that may be controlled by UC. (see Humpleman, column 15 ,lines 20-55; upon user selection, the session manger polls the device list file which contain all the available device)

As per claim 10, Humpleman teaches a method according to claim 1, wherein communications between said UC and said computing element are made via Hypertext Transfer Protocol (HTTP). (see, Humpleman each home device contain interface data of HTML that

Art Unit: 2174

provides an interface for the commanding and controlling of the home device over the home network)

As per claim 11, Humpleman teaches a method according to claim 1, wherein said computing element is one from the group of a computing device and an application. (see Humpleman column 6 ,lines 45-column 7, lines 10; the computing element includes computing device such as DTV, DVCR, DVD, DSS-NIU)

As per claim 13, Humpleman teaches a method according to claim 1, wherein said canonical UI representation includes a representation associated with a parameter for choosing one element a from a set A. (see Humpleman; column 18, lines 5-35; use selects the display parameter from a list of the available device)

As per claim 14, Humpleman teaches A method according to claim 1, wherein said canonical UI representation includes a representation associated with a parameter for selecting a subset A' from a set A. (see Humpleman; column 18, lines 5-35; use selects two device for the display parameter from a list of the available device)

As per claim 24, Humpleman teaches a method according to claim 1, Humpleman further teaches wherein said canonical UI representation includes a representation associated with a command construct that specifies at least one action to send to the controlled element that will carry out the action-command. (see Humpleman; column 18, lines 10-25; The user selects the

Art Unit: 2174

DVCR device button, the session manager determines the particular capabilities of the selected DVCR device and compares them with the particular capabilities of the other accessible devices on the home network; see Humpleman; column 8, lines 5-20; In order to invoke the local http server to respond, clicking on a button preferably involves an http access to the local machine name or IP address. In turn, the Http server invokes the local device control program, such as “brightness.”)

As per claim 25, Humpleman teaches a method according to claim 24. Humpleman further teaches wherein said canonical UI representation includes a description of the parameters associated with the at least one action.(see Humpleman; column 13, lines 55-column 14, lines 5; see Humpleman; column 8, lines 5-20; In order to invoke the local http server to respond, clicking on a button preferably involves an http access to the local machine name or IP address. In turn, the Http server invokes the local device control program, such as “brightness.”)

As per claim 42, Humpleman teaches a computer system comprising at least one universal console (UC) and at least one computing element operable to allow a user to control said at least one computing element, said system comprising:

at least one computing element having a pre-defined canonical user interface (UI) associated therewith, wherein said canonical user interface includes at least one action-command

Art Unit: 2174

operable to control said computing element; (see Humpleman, column 7, lines 15-60; The home device, which includes computing element, transfers its HTML to DTV, which the user can use to control the home device. HTML defines the control and and command for that particular home device;)

a universal console for controlling said at least one computing element and operable to store user preferences input to the computer system by the user; (see Humpleman, column 21 ,lines 25-55; The uses can indicate his preference for a home device, by creating a macro and choosing the parameters of the respective home device to their desired value, further; and home device includes pc and DTV; see Humpleman, column 23 ,lines 1-12; which are universal console because they control other device through macro; see Humpleman; column 6, lines 50-60; see Humpleman; column 21, lines 50-70; save macro on home device)

wherein said at least one computing element communicates its associated canonical user interface to said universal console; (see Humpleman; column 8, lines 5-20; In order to invoke the local http server to respond, clicking on a button preferably involves an http access to the local machine name or IP address. In turn, the Http server invokes the local device control program, such as "brightness.")

Art Unit: 2174

wherein said universal console instantiates a user interface as a function of said canonical user interface and said stored user preferences; (see Humpleman, column 21 ,lines 25-55; The uses can indicate his preference for a home device, by creating a macro and choosing the parameters of the respective home device to their desired value, further; and home device includes pc and DTV; see Humpleman, column 23 ,lines 1-12; which are universal console because they control other device through macro; see Humpleman; column 6, lines 50-60) and

wherein, thereafter, said universal console s operable to control said computing element via said user interface description by user-selection of said at least one action-command. (see Humpleman; column 18, lines 10-25; The user selects the DVCR device button, the session manager determines the particular capabilities of the selected DVCR device and compares them with the particular capabilities of the other accessible devices on the home network)

As per claims 43, 46-52, 54, 55, and 65-66, they are rejected under the same rationale as claims 2, 5-11, 13, 14, and 24-25. Supra.

As per claim 67, Humpleman teaches A computer readable medium comprising computer executable instructions for controlling at least one computing element with a universal console (UC), comprising:

means for receiving input from a user indicative of at least one user preference for a universal console; (see Humpleman, column 21 ,lines 25-55; The uses can indicate his

Art Unit: 2174

preference for a home device, by creating a macro and choosing the parameters of the respective home device to their desired value, further; and home device includes pc and DTV; see Humpleman, column 23 ,lines 1-12; which are universal console because they control other device through macro; see Humpleman; column 6, lines 50-60)

means for storing the at least one user preference; (see Humpleman; column 21, lines 50-70; save macro on home device)

means for selecting a computing element to control with the universal console; (see Humpleman, column 22, lines 40-50; The user selects the DVCR device button, the session manager determines the particular capabilities of the selected DVCR device and compares them with the particular capabilities of the other accessible devices on the home network; column 18, lines 20-55)

means for receiving by the universal console a canonical user interface (UI) representative of the computing element's user interface, wherein the canonical user interface is pre-defined for the computing element and includes at least one action-command operable to control said computing element; (see Humpleman, column 7, lines 15-60; The home device, which includes computing element, transfers its HTML to DTV, which the user can use to control the home device. HTML defines the control and and command for that particular home device)

means for instantiating a user interface description by the universal console as a function of the canonical user interface and the stored at least one user preference; (see Humpleman; column 18, lines 10-25; The user selects the DVCR device button, the session manager determines the particular capabilities of the selected DVCR device and compares them with the particular capabilities of the other accessible devices on the home network)

means for selecting at least one action-command to be carried out by the computing element; (see Humpleman; column 18, lines 10-25; The user selects the DVCR device button, the session manager determines the particular capabilities of the selected DVCR device and compares them with the particular capabilities of the other accessible devices on the home network) and

means for transmitting to the computing element data associated with said at least one action-command. (see Humpleman; column 8, lines 5-20; In order to invoke the local http server to respond, clicking on a button preferably involves an http access to the local machine name or IP address. In turn, the Http server invokes the local device control program, such as "brightness.")

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2174

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 15, 18-21, 44, 56, and 589-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman US Patent 6,243,707 in view of Miller US Patent 6,243,707.

As per claim 3, Humpleman teaches a method according to claim 1. Humpleman fails to teach method further comprising interacting with at least one group hierarchy to obtain data in connection with said selected at least one action command to be carried out by the computing element.

Miller teaches a method further comprising interacting with at least one group hierarchy to obtain data in connection with said selected at least one action command to be carried out by the computing element. (see Miller column 2, lines 20-30; column 1, lines 30-40; Miller 's user interface display generates a display of multiple hierarchically ordered menus.)

It would have been obvious to an artisan at the time of the invention to include Miller's teaching with method of Humpleman in order to provide user with a simple graphical user interface for user interactive operation of apparatus.

As per claim 15, Humpleman teaches a method according to claim 1. Humpleman fails to teach wherein said canonical UI representation includes a representation associated with a parameter for selecting one from the group of True/False, Off/On, OK/Cancel and Yes/No.

Miller teaches wherein said canonical UI representation includes a representation associated with a parameter for selecting one from the group of True/False, Off/On, OK/Cancel

Art Unit: 2174

and Yes/No. (see Miller, column 6, lines 55-65; Menu item indicates subtitle activation status to the user with off/on status)

It would have been obvious to an artisan at the time of the invention to include Miller's teaching with method of Humpleman in order to provide users with a subtitle option

As per claim 18, Humpleman teaches a method according to claim 1. Humpleman fails to teach wherein said canonical UI representation includes a representation associated with a parameter type for an arbitrary string s.

Miller teaches canonical UI representation includes a representation associated with a parameter type for an arbitrary string s. (see Miller, column 6, lines 45—55; User can associate password parameter with an arbitrary string)

It would have been obvious to an artisan at the time of the invention to include Miller's teaching with method of Humpleman in order to allow users to set up a password.

As per claim 19, Humpleman and Miller teach a method according to claim 18. Miller further teaches wherein said arbitrary string s is to be selected from a suggestion set of strings S. (see Miller, column 7, lines 10-20; User can selection a language from a set of the language choices.)

It would have been obvious to an artisan at the time of the invention to include Miller's teaching with method of Humpleman in order to provide users with a subtitle option.

As per claim 20, Humpleman teaches a method according to claim 1. Humpleman fails teaches said canonical UI representation includes a representation associated with a parameter type for the modification of a given first string s, resulting in a second string s'.

Miller teaches said canonical UI representation includes a representation associated with a parameter type for the modification of a given first string *s*, resulting in a second string *s'*. (see Miller, column 7, lines 30-45; User can the complete the given parameter in order to create a player list)

It would have been obvious to an artisan at the time of the invention to include Miller's teaching with method of Humpleman in order to allow to set up a player list for dvd and cd player.

As per claim 21, Humpleman teaches a method according to claim 1. Humpleman fails to teach wherein said canonical UI representation includes a representation associated with a parameter type for ordering the elements of set *A* into *A'*.

Miller teaches wherein said canonical UI representation includes a representation associated with a parameter type for ordering the elements of set *A* into *A'*. (see Miller, column 7, lines 30-45; Users can reorder the songs within the playlist)

It would have been obvious to an artisan at the time of the invention to include Miller's teaching with method of Humpleman in order to allow to set up a player list for dvd and cd player.

As per claims 44, 56, and 59-62, they are rejected under the same rationale as claims 3, 15, 18-21. Supra.

Claims 16, 17, 57, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman US Patent 6,243,707 in view of Davis US Patent 5,615,347.

As per claim 16, Humpleman teaches a method according to claim 1. However, Humpleman fails to teach wherein said canonical UI representation includes a representation associated with a parameter for selecting an integer n in the range $n1$ through $n2$, with increment ϕ .

Davis teaches a canonical UI representation includes a representation associated with a parameter for selecting an integer n in the range $n1$ through $n2$, with increment ϕ . (see Davis, column 11, lines 1-27; The users can increase the timer by mins)

It would have been obvious to an artisan at the time of the invention to include Davis' teaching with method of Humpleman in order to provide users with the ability to set timers.

As per claim 17, Humpleman teaches a method according to claim 1. However, Humpleman fails to teach wherein said canonical UI representation includes a representation associated with a parameter for selecting a real number x in the range $x1$ through $x2$, with increment ϕ .

Davis teach wherein said canonical UI representation includes a representation associated with a parameter for selecting a real number x in the range $x1$ through $x2$, with increment ϕ . (see Davis, column 11, lines 1-27; The users can increase the timer by fraction of hour)

It would have been obvious to an artisan at the time of the invention to include Davis' teaching with method of Humpleman in order to provide users with the ability to set timers.

As per claims 57 and 58, they are rejected under the same rationale as claims 16 and 17. Supra.

Claims 22, 23, 63, and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman US Patent 6,243,707 in view of Yoshino US Patent 6,131,111.

As per claim 22, Humpleman teaches a method according to claim 1. However, Humpleman fails to teach wherein said canonical UI representation includes a representation associated with a parameter type for pairing set A elements with set B elements.

Yoshino teaches canonical UI representation includes a representation associated with a parameter type for pairing set A elements with set B elements. (see, Yoshino, column 7, lines 20-63; Users associates D-TV and its channel with D-VCR and its recoding operation)

It would have been obvious to an artisan at the time of the invention to include Yoshino's teaching with method of Humpleman in order to provide users with the ability to connect devices together.

As per claim 23, Humpleman teaches a method according to claim 1. However, Humpleman fails to teach wherein said canonical UI representation includes a representation associated with a group that contains at least one of commands and subgroups.

Yoshino teaches canonical UI representation includes a representation associated with a group that contains at least one of commands and subgroups. (see, Yoshino, column 7, lines 20-63; Users associates D-TV and its channel with a recoding operation)

It would have been obvious to an artisan at the time of the invention to include Yoshino's teaching with method of Humpleman in order to provide users with the ability to connect devices together.

As per claims 63 and 64, they are rejected under the same rationale as claims 22 and 23. Supra.

Claims 4 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman US Patent 6,243,707 in view of Orr US Patent RE 39,003.

As per claim 4, Humpleman teaches a method according to claim 1. However, Humpleman fails to teach wherein said storing includes storing data indicating at least one disability of the user.

Orr et al. teaches wherein said storing includes storing data indicating at least one disability of the user. (see Orr, column 2, lines 35-30; Users set desire parameters for caption based on their disability)

It would have been obvious to an artisan at the time of the invention to include Orr's teaching with method of Humpleman in order to provide user who is both hearing and seeing impaired may optimize the video and text sizes to suit the disability of the user.

As per claim 45, it is rejected under the same rationale as claims 4. Supra.

Claims 12 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman US Patent 6,243,707 in view of Donner US Patent 7,162,454.

As per claim 12, Humpleman teaches a method according to claim 1. However, Humpleman fails to teach wherein said remote procedure call mechanism makes calls according to Simple Object Activation Protocol (SOAP).

Donner teaches a remote procedure call mechanism makes calls according to Simple Object Activation Protocol (SOAP). (see Gandhi, column 32, lines 1-20; Simple object access protocol (SOAP) is used for remote procedure calls based on XML, and HTTP.)

It would have been obvious to an artisan at the time of the invention to include Donner's teaching with method of Humpleman in order to provide device control after its discovery.

As per claim 53, it is rejected under the same rationale as claim 12. Supra.

Response To Argument

Applicant's arguments with respect to claims 1-25, and 42-67 have been considered but are deemed to be moot in view of the new grounds of rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peng Ke whose telephone number is (571) 272-4062. The examiner can normally be reached on M-Th and Alternate Fridays 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine L. Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 09/775,033

Page 22

Art Unit: 2174

Peng Ke

Patent Examiner

Art Unit 2174, TC 2100

/Peng Ke/

A handwritten signature in black ink, appearing to be 'Peng Ke', with a long horizontal stroke extending to the right.